

CLAIMS

1. Method allowing control of an evaporative light scattering detector which is coupled to a liquid chromatography column, substantially independently of the elution conditions for the chromatographic separation, characterised in that a given adjustable constant calibrated volume of the flow which originates from the chromatography column is removed at a given adjustable frequency, this flow being constituted by an eluent which contains compounds to be analysed which have been dissolved therein, and the volume removed in this manner is transferred to a secondary circuit, to which the evaporative light scattering detector is connected, by being conveyed by means of an auxiliary pump with a specific carrier fluid which is independent of the eluent and which has a predetermined flow, and the successive fractions of the flow which originates from the chromatography column are mixed with the carrier fluid which conveys these fractions upstream of the evaporative light scattering detector.
2. Method according to claim 1, characterised in that it is used to control an evaporative light scattering detector which is coupled to a liquid chromatography column in the case of separation by elution gradient so as to attenuate the variations in the response of the evaporative light scattering detector in accordance with the nature of the eluent.
3. Method according to either claim 1 or 2, characterised in that, in the presence of majority compounds and minority compounds, the calibrated volumes transferred to the secondary circuit and the transfer frequency are varied during analysis.
4. Method according to any one of claims 1 to 3, characterised in that the nature and the flow of the carrier fluid are selected so as to fix response coefficient (b) of the evaporative light scattering detector at an adjustment value so as to facilitate the analyses and/or to increase the precision and reliability thereof, slope (b) of the calibration curves being determined by the equation:

$$\text{Log A} = b \text{ Log m} + \text{Log a}$$

where A represents the area of the signal which measures the intensity emitted by one of the compounds to be analysed and m is the mass or the concentration of this compound in the sample.

5. Method according to any one of claims 1 to 4, characterised in that the adjustment value (b) is a value of approximately unity.

6. Method according to any one of claims 1 to 4, characterised in that the adjustment value (b) is the maximum possible value.

7. Method according to any one of claims 1 to 6, characterised in that an auxiliary chromatography column is connected to the secondary circuit upstream of the evaporative light scattering detector.